Amendments to the claims

The listing of claims replaces all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A polyethylene terephthalate ~~terphthalate~~-containing polymer formed by polymerizing a mixture comprising:

(a) terephthalic acid or an ester equivalent thereof,

(b) a glycol,

(c) an aliphatic dicarboxylic acid or an ester equivalent thereof, and

(d) a hydroxy terminated polyether polyol~~,~~ or an aliphatic or an alicyclic diol,

wherein the mixture comprises:

(1) a molar ratio of the glycol and the terepthalic acid of 1 to 3.5;

(2) 2 to 10 weight percent of the aliphatic dicarboxylic acid based on the weight of the polymer; and

(3) the hydroxy terminated polyether polyol in an amount such that the hydroxy terminated polyether polyol is equivalent to 1 to 5 weight percent in the polymer; or

(4) the aliphatic or alicyclic diol in an amount such that the aliphatic or alicyclic diol is equivalent to 1 to 5 weight percent in the polymer.

Claim 2 (currently amended): A method for making a polyethylene terephthalate-containing polymer comprising:

preparing a mixture comprising a glycol and terephthalic acid or an ester equivalent thereof, wherein the mixture further comprises an aliphatic dicarboxylic acid;

charging the mixture in a reactor;

esterifying the mixture under nitrogen pressure;

adding a hydroxyl terminated polyether polyol, to the mixture; and

carrying out a polycondensation reaction, wherein the polymer is formed in a continuous polymer fiber manufacturing process.

Claim 3 (currently amended): A method for making a polyethylene terephthalate-containing polymer comprising:

polymerizing a mixture comprising an aliphatic dicarboxylic acid in an amount of 2 to 10-weight percent based on the weight of the polymer, a glycol and terephthalic acid or an ester equivalent thereof;

injecting 1 to 4-weight percent of a hydroxy terminated polyether polyol based on the weight of the polymer into the mixture;

obtaining a poly(alkylene dicarboxylate)-containing pre-polymer; and

removing excess glycol from the mixture.

Claim 4 (previously presented): The method as claimed in claim 2, wherein the said method is a continuous or batch polymerization method.

Claim 5 (previously presented): The polymer as claimed in claim 1 wherein said aliphatic dicarboxylic acid is selected from the group consisting of adipic acid, sebacic acid, and azelaic acid.

Claim 6 (previously presented): The polymer as claimed in claim 1 wherein the hydroxy terminated polyether polyol or the aliphatic or alicyclic diol is selected from the group consisting of polyethylene glycol (PEG), Monoethylene glycol (MEG), and polypropylene glycol (PPG).

Claim 7 (previously presented): A filament comprising said polymer of claim 1.

Claim 8 (original): The filament as claimed in claim 7, wherein said filament is dyed with dispersed dye without dye carrier to have a dye index greater than 100.

Claim 9 (previously presented): The filament as claimed in claim 7, wherein said dye index of said dyed filament is at least about 120-600.

Claim 10 (previously presented): The filament as claimed in claim 7, wherein a controlled shrinkage of said filament is 6 to 10%.

Claim 11 (previously presented): A yarn comprising said filaments as claimed in claim 7, wherein said yarn is POY or FDY.

Claim 12 (original): The yarn as claimed in claim 11, wherein said yarn is optionally texturised to obtain DTY or FTTY.

Claim 13 (previously presented): The yarn as claimed in 11, wherein said yarn is dyed with a dispersed dye without dye carrier at 100 °C to have a dye index greater than 100.

Claim 14 (previously presented): The yarn as claimed in claim 11, wherein said dye index of said dyed yarn is at least about 120-600.

Claim 15 (previously presented): The yarn as claimed in claim 11, wherein said yarn has a controlled shrinkage of 6 to 10%.

Claim 16 (previously presented): A staple fiber comprising said polymer of claim 1.

Claim 17 (original): The staple fiber as claimed in claim 16 wherein said staple fiber is dyed with a dispersed dye without dye carrier at 100 °C to have a dye index greater than 100.

Claim 18 (previously presented): The staple fiber as claimed in claim 16 wherein said dye index of said dyed yarn is at least about 120-600.

Claim 19 (previously presented): The staple fiber as claimed in claim 16, wherein said yarn has a controlled shrinkage of 6 to 10%.

Claim 20 (previously presented): A yarn comprising staple fibers as claimed in claim 16.

Claim 21 (original): The yarn as claimed in claim 20, wherein said yarn is dyed with a dispersed dye without dye carrier at 100 °C to have a dye index greater than 100.

Claim 22 (previously presented): The yarn as claimed in claim 20, wherein said dye index of said dyed yarn is at least about 120-600.

Claim 23 (previously presented): The yarn as claimed in claim 20, wherein said yarn has a controlled shrinkage of 6 to 10%.

Claim 24 (previously presented): The yarn as claimed in claim 11, wherein said yarn is used to produce woven or knitted fabric.

Claim 25 (previously presented): A woven or knitted fabric comprising yarn as claimed in claim 11.

Claim 26 (original): The fabric as claimed in claim 25, wherein said fabric is dyed with disperse dye without carrier to have a dye index greater than 100 and 6 to 10% controlled shrinkage.

27. (canceled)

Claim 28 (previously presented): The method of claim 2, wherein the glycol and the terephthalic acid or the ester equivalent thereof is in a molar ratio of 1 to 3.5, further wherein the mixture comprises 2 to 10 weight percent the aliphatic dicarboxylic acid based on the weight of the polymer and 1 to 5 weight % of the hydroxyl terminated polyether polyol based on the weight of the polymer.